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## Description

POLYMER-SUPPORTED ARENE-RUTHENIUM COMPLEX, CATALYST

THEREOF, AND ORGANIC SYNTHESIS METHOD USING THE SAME

This application is a 371 of PCT/Jp03/02861 filed on 03/11/2003,

Technical Field

The present invention relates to a polymer-supported arene-ruthenium complex, a catalyst thereof, and organic synthesis methods using the same.

**Background Art** 

It has been known that arene-ruthenium complexes with aromatic rings coordinated to Ru are usable as catalyst precursors for various organic synthesis reactions. However, the reaction catalysts prepared from the arene-ruthenium complexes are disadvantageous in that they are deteriorated by contact with air or moisture and that it is often difficult to recover them.

Catalysts supported on polymers have been studied to overcome these disadvantages. However, practical methods of supporting the catalyst on the polymer have not been established, and experimental polymer-supported catalysts have outstanding serious disadvantages of low catalytic activity and limitation on reactions to which the catalyst can be applied.

Accordingly, an object of the present invention is to fundamentally overcome the above problems, thereby providing a novel